



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

H.A

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/779,674	02/18/2004	Yi-Fang Chou	0941-0918P	8543

2292 7590 04/24/2007
BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

PRESTON, ERIK D

ART UNIT	PAPER NUMBER
----------	--------------

2834

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	04/24/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 04/24/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/779,674

Applicant(s)

CHOU ET AL.

Examiner

Erik D. Preston

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 9-18 and 20-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-18 and 20-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/25/2007 has been entered.

Drawings

The drawings were received on 7/5/2006. These drawings are accepted by the examiner.

The drawings filled on 9/29/2005 are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the hooks having a profile corresponding to that of the gap for positioning itself in the gap (Claims 7 & 18) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet,

and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claims 11 & 22 are objected to because of the following informalities: In the 1st line of the claims, the phrase "...wherein the stator blades..." lacks proper antecedent basis and, for examination purposes, will be interpreted as saying "...wherein the ribs or stator blades..." Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 7 & 18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no mention in the originally filed

disclosure of the hook having a profile corresponding to that of the gap for positioning itself in said gap.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3,5,6,9,12-14,16,17 & 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Watanabe et al. (JP 8-205450, previously cited).

With respect to claims 1 & 12, Watanabe teaches a fan assembly comprising: a rotor (as seen in Fig. 1, #17); and a fan housing (as seen in Fig. 1) having a base to receive the fan housing comprising: a main body (Fig. 4, #16); a first section disposed on the main body and having a through hole (Fig. 4a, #25); a second section (as seen in Fig. 4a) disposed on the main body, wherein a gap (Fig. 4a, #35) is formed in between the first and second sections; and a fixing portion (the radially innermost portion of the gap) formed in the gap; and a fastening structure passing through the first section via the through hole and having a part (Fig. 4a, #22) with a profile corresponding to that of the gap for positioning the part in the gap (as seen in Fig. 4b); wherein the second section prevents one end of the fastening structure from being exposed.

With respect to claims 2 & 13, Watanabe teaches the assembly of claims 1 & 12, wherein the fixing portion prevents the fastening structure from rotation and limits the position of the fastening structure.

With respect to claims 3 & 14, Watanabe teaches the assembly of claims 2 & 13, wherein the fastening structure includes a screw and the part is a nut disposed in the gap and having the profile substantially identical to that of the gap, the nut is aligned with the through hole by the fixing portion, the screw passes through the through hole and engages with the nut, and the first and second sections prevent the nut from moving along an axial direction of the screw.

With respect to claims 5 & 16, Watanabe teaches the assembly of claims 2 & 13, wherein the fastening structure has a profile corresponding to that of the fixing portion (as seen in Fig. 4b).

With respect to claims 6 & 17, Watanabe teaches the assembly of claims 1 & 12, wherein the main body is rectangular (as seen in Fig. 1), and the first and second sections, the fixing portion and the fastening structure are disposed at corners of the main body (as seen in Figs. 1 & 4).

With respect to claims 9 & 20, Watanabe teaches the assembly of claims 1 & 12, wherein the main body, the first and second sections and the fixing portion are an integral structure. The limitation of the integral structure being formed by injection molding is a method limitation given no patentable weight in an apparatus claim.

Claim 23 is rejected under 35 U.S.C. 102(b) as being anticipated by Tichy (DE 3809627). Tichy teaches an assembly comprising: a rotor (which inherently exists in the fan as taught by Tichy); a fan housing (Fig. 15, #16) receiving the rotor therein and having a main body with a first section (Fig. 15, #16A) having a hole (Fig. 8, #16B), and

a second section (the uppermost lip of the motor housing), wherein a gap is formed between the first and second sections; and a fastening structure (Fig. 8, #14), having a hook (Fig. 8, #11), and joining the gap from outside of the fan housing (as seen in Fig. 8, a portion of the fastening structure (#11) is outside of the housing (#16)).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 & 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. (JP 8-205450, previously cited) in view of Emberson (US 4099274). Watanabe teaches the assembly of claims 3 & 14, but it does not explicitly teach the second section having a recess aligned with the through hole of the first section, the screw being further accommodated by the recess. However, Emberson teaches a nut retaining fastening system (Fig. 2) comprising first and second sections having a gap therebetween, wherein said second section includes a recess (Fig. 4, #84) aligned with the through hole (Fig. 2, #64) of the first section, a screw being further accommodated by the recess. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the second section of Watanabe in view of the recess as taught by Emberson because it provides an equivalent and equally well known means for retaining a nut for a fastening means that has the added benefit of providing a screw receiving aperture (Emberson, Col. 5, lines 19-42).

Claims 7 & 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. (JP 8-205450, previously cited) in view of Tichy (DE 3809627).

Watanabe teaches the assembly of claims 1 & 12, but it does not teach the part being a hook passing through the through hole and connected to the gap for mounting the fan housing on the frame in the system. However, Tichy teaches a hook (Fig. 8, #11) passing through a through hole (Fig. 8, #16B) and connected to a gap (Fig. 8, #6) for mounting a fan housing (Fig. 15, #16) on a frame (Fig. 8, #5). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the fastener of Watanabe in view of the hooks as taught by Tichy because they provide an equivalent and equally well known fastening means for use in mounting fans that has the added benefit of having damping and air-sealing properties (Tichy, Abstract).

Claims 10, 11, 21 & 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. (JP 8-205450, previously cited) in view of Chung (US 5997265).

With respect to claims 10 & 21, Watanabe teaches the system of claims 1 & 12, but it does not explicitly teach a base at a bottom of the main body, wherein a plurality of ribs or stator blades are disposed between the base and the main body for guiding an air flow. However, Cheng teaches a fan with a base (Fig. 1, #11) at a bottom of a main body, wherein a plurality of ribs (Fig. 1, #121) or stator blades are disposed between the base and the main body for guiding an air flow. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the fan of Watanabe in view of the base and ribs as taught by Chung because it provides an extremely well known

means for attaching a fan motor to its main body for air flow (Chung, Col. 2, Lines 31-35).

With respect to claims 11 & 22, Watanabe in view of Chung teaches the system of claims 10 & 21, and Chung teaches that the ribs or stator blades have the same inclined angle (as seen in Fig. 1).

Response to Arguments

Applicant's arguments with respect to claims 1-7,9-18 & 20-23 have been considered but are moot in view of the new ground(s) of rejection.

In response to the applicant's argument that Watanabe fails to disclose a fastening structure having a part with a profile corresponding to that of the gap for positioning the part in the gap, it is noted that Watanabe teaches this limitation in Fig. 4b.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erik D. Preston whose telephone number is (571)272-8393. The examiner can normally be reached on Monday through Friday 8-5.

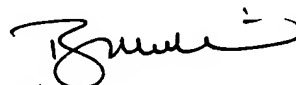
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571)272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2834

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



03/28/2007



BURTON S. MULLINS
PRIMARY EXAMINER



REPLACEMENT SHEET

Accepted - Z

5

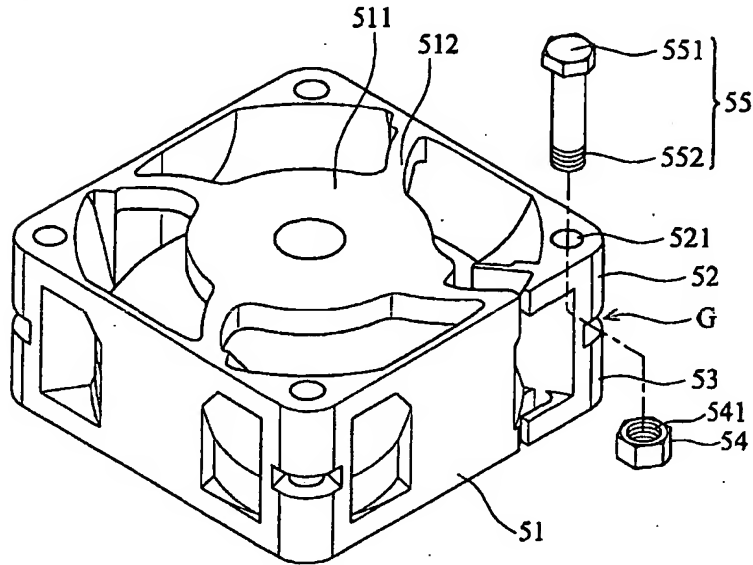


FIG. 5a

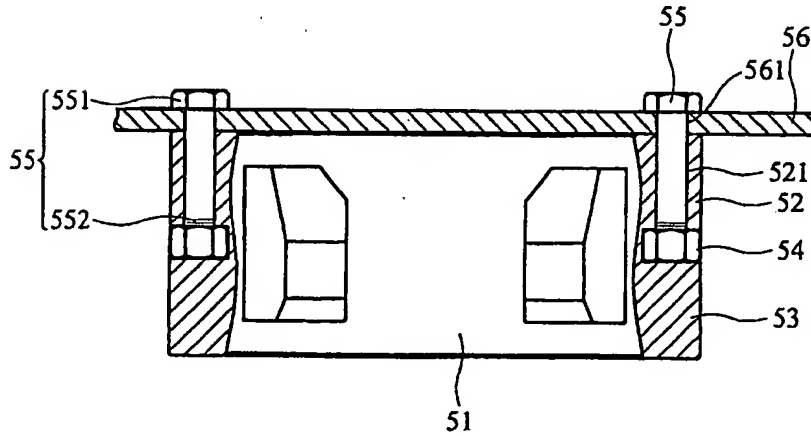


FIG. 5b